SEQUENCE LISTING

<110> The Procter & [redacted]ple Company
Broeckx, Walter [redacted] M.
Johnston, James P.
Parry, Diane

<120> Low Density Particulate Solids Useful In Laundry Detergents

<130> 7419

<160> 7

<170> PatentIn version 3.1

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<212> DNA
<213> bacillus amyloliquefaciens

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Val Arg Gly Lys Lys Val
1 5

tgg atc agt ttg ctg ttt gct tta gcg tta atc ttt acg atg gcg ttc 161
Trp Ile Ser Leu Leu Phe Ala Leu Ala Leu Ile Phe Thr Met Ala Phe
10 15 20

ggc agc aca tcc tct gcc cag gcg gca ggg aaa tca aac ggg gaa aag 209
Gly Ser Thr Ser Ser Ala Gln Ala Ala Gly Lys Ser Asn Gly Glu Lys
25 30 35

aaa tat att gtc ggg ttt aaa cag aca atg agc acg atg agc gcc gct 257
Lys Tyr Ile Val Gly Phe Lys Gln Thr Met Ser Thr Met Ser Ala Ala
40 45 50

aag aag aaa gat gtc att tct gaa aaa ggc ggg aaa gtg caa aag caa 305
Lys Lys Lys Asp Val Ile Ser Glu Lys Gly Gly Lys Val Gln Lys Gln
55 60 65 70

ttc aaa tat gta gac gca gct tca gtc aca tta aac gaa aaa gct gta 353
Phe Lys Tyr Val Asp Ala Ala Ser Val Thr Leu Asn Glu Lys Ala Val
75 80 85

aaa gaa ttg aaa aaa gac ccg agc gtc gct tac gtt gaa gaa gat cac 401
Lys Glu Leu Lys Lys Asp Pro Ser Val Ala Tyr Val Glu Glu Asp His
90 95 100

gta gca cat gcg tac gcg cag tcc gtg cct tac ggc gta tca caa att 449
Val Ala His Ala Tyr Ala Gln Ser Val Pro Tyr Gly Val Ser Gln Ile
105 110 115

aaa gcc cct gct ctg cac tct caa ggc tac act gga tca aat gtt aaa 497
Lys Ala Pro Ala Leu His Ser Gln Gly Tyr Thr Gly Ser Asn Val Lys
120 125 130

gta gcg gtt atc gac agc ggt atc gat tct tct cat cct gat tta aag 545
Val Ala Val Ile Asp Ser Gly Ile Asp Ser Ser His Pro Asp Leu Lys
135 140 145 150

gta gca agc gga gcc agc atg gtt cct tct gaa aca aat cct ttc caa 593
Val Ala Ser Gly Ala Ser Met Val Pro Ser Glu Thr Asn Pro Phe Gln
155 160 165

gac aac aac tct cac gga act cac gtt gcc ggc aca gtt gcg gct ctt 641
Asp Asn Asn Ser His Gly Thr His Val Ala Gly Thr Val Ala Ala Leu
170 175 180

aat aac tca atc ggt gta tta ggc gtt gcg cca agc gca tca ctt tac 689
Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala Ser Leu Tyr
185 190 195

gct gta aaa gtt ctc ggt gct gac ggt tcc ggc caa tac agc tgg atc 737
Ala Val Lys Val Leu Gly Ala Asp Gly Ser Gly Gln Tyr Ser Trp Ile
200 205 210

att aac gga atc gag tgg gcg atc gca aac aat atg gac gtt att aac 785
Ile Asn Gly Ile Glu Trp Ala Ile Ala Asn Asn Met Asp Val Ile Asn
215 220 225 230

atg agc ctc ggc gga cct tct ggt tct gct gct tta aaa gcg gca gtt 833
Met Ser Leu Gly Gly Pro Ser Gly Ser Ala Ala Leu Lys Ala Ala Val
235 240 245

gat aaa gcc gtt gca tcc ggc gtc gta gtc gtt gcg gca gcc ggt aac 881
Asp Lys Ala Val Ala Ser Gly Val Val Val Val Ala Ala Ala Gly Asn
250 255 260

gaa ggc act tcc ggc agc tca agc aca gtg ggc tac cct ggt aaa tac 929
Glu Gly Thr Ser Gly Ser Ser Ser Thr Val Gly Tyr Pro Gly Lys Tyr
265 270 275

cct tct gtc att gca gta ggc gct gtt gac agc agc aac caa aga gca 977
Pro Ser Val Ile Ala Val Gly Ala Val Asp Ser Ser Asn Gln Arg Ala
280 285 290

tct ttc tca agc gta gga cct gag ctt gat gtc atg gca cct ggc gta 1025
Ser Phe Ser Ser Val Gly Pro Glu Leu Asp Val Met Ala Pro Gly Val
295 300 305 310

tct atc caa agc acg ctt cct gga aac aaa tac ggg gcg tac aac ggt 1073
Ser Ile Gln Ser Thr Leu Pro Gly Asn Lys Tyr Gly Ala Tyr Asn Gly
315 320 325

acg tca atg gca tct ccg cac gtt gcc gga gcg gct gct ttg att ctt 1121
Thr Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu Ile Leu
330 335 340

tct aag cac ccg aac tgg aca aac act caa gtc cgc agc agt tta gaa 1169
Ser Lys His Pro Asn Trp Thr Asn Thr Gln Val Arg Ser Ser Leu Glu
345 350 355

aac acc act aca aaa ctt ggt gat tct ttg tac tat gga aaa ggg ctg 1217
Asn Thr Thr Thr Lys Leu Gly Asp Ser Leu Tyr Tyr Gly Lys Gly Leu
360 365 370

atc aac gta caa gcg gca gct cag taaaacataa aaaaccggcc ttggccccgc 1271
Ile Asn Val Gln Ala Ala Ala Gln
375 380

cggtttttta ttatttttct tcctccgcat gttcaatccg ctccataatc gacggatggc 1331

tccctctgaa aattttaacg agaaacggcg ggttgacccg gctcagtccg gtaacggcca 1391

actcctgaaa cgtctcaa[illegible] gccgcttccc ggtttccggt cagctcaatg ccataacggt 1451

cggcggcgtt ttcctgatac cgggagacgg cattcgtaat cggatc 1497

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<213> bacillus amyloliquefaciens

<400> 2

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Lys Ser Asn Gly Glu Lys Lys Tyr Ile Val Gly Phe Lys Gln Thr Met
        35   40   45

Ser Thr Met Ser Ala Ala Lys Lys Lys Asp Val Ile Ser Glu Lys Gly
    50   55   60

Gly Lys Val Gln Lys Gln Phe Lys Tyr Val Asp Ala Ala Ser Val Thr
65   70   75   80

Leu Asn Glu Lys Ala Val Lys Glu Leu Lys Lys Asp Pro Ser Val Ala
                85   90   95

Tyr Val Glu Glu Asp His Val Ala His Ala Tyr Ala Gln Ser Val Pro
            100   105   110

Tyr Gly Val Ser Gln Ile Lys Ala Pro Ala Leu His Ser Gln Gly Tyr
        115   120   125

Thr Gly Ser Asn Val Lys Val Ala Val Ile Asp Ser Gly Ile Asp Ser
    130   135   140

Ser His Pro Asp Leu Lys Val Ala Ser Gly Ala Ser Met Val Pro Ser
145   150   155   160

Glu Thr Asn Pro Phe Gln Asp Asn Asn Ser His Gly Thr His Val Ala
                165   170   175

Gly Thr Val Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala
            180   185   190

Pro Ser Ala Ser Leu Tyr Ala Val Lys Val Leu Gly Ala Asp Gly Ser
        195   200   205

Gly Gln Tyr Ser Trp Ile Asn Gly Ile Glu Trp Ala Il a Asn
210 220

Asn Met Asp Val Ile Asn Met Ser Leu Gly Gly Pro Ser Gly Ser Ala
225 230 235 240

Ala Leu Lys Ala Ala Val Asp Lys Ala Val Ala Ser Gly Val Val Val
245 250 255

Val Ala Ala Ala Gly Asn Glu Gly Thr Ser Gly Ser Ser Ser Thr Val
260 265 270

Gly Tyr Pro Gly Lys Tyr Pro Ser Val Ile Ala Val Gly Ala Val Asp
275 280 285

Ser Ser Asn Gln Arg Ala Ser Phe Ser Ser Val Gly Pro Glu Leu Asp
290 295 300

Val Met Ala Pro Gly Val Ser Ile Gln Ser Thr Leu Pro Gly Asn Lys
305 310 315 320

Tyr Gly Ala Tyr Asn Gly Thr Ser Met Ala Ser Pro His Val Ala Gly
325 330 335

Ala Ala Ala Leu Ile Leu Ser Lys His Pro Asn Trp Thr Asn Thr Gln
340 345 350

Val Arg Ser Ser Leu Glu Asn Thr Thr Thr Lys Leu Gly Asp Ser Leu
355 360 365

Tyr Tyr Gly Lys Gly Leu Ile Asn Val Gln Ala Ala Ala Gln
370 375 380

<210> 3
<211> 1497
<212> PRT
<213> bacillus amyloliquefaciens

<400> 3

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Thr Thr Ala Ala Thr Ala Cys Ala Cys Ala Gly Ala Ala Thr Ala Ala
35 40 45

Thr Cys Thr Gly Thr Cys Thr Ala Thr Thr Gly Gly Thr Thr Ala Thr
50 55 60

Thr Cys Thr Gly Cys Ala Ala Ala Thr Gly Ala Ala Ala Ala Ala Ala
65 70 75 80

Ala Gly Gly Ala Gly Ala Gly Gly Ala Thr Ala Ala Ala Gly Ala Gly
85 90 95

Thr Gly Ala Gly Ala Gly Gly Cys Ala Ala Ala Ala Ala Ala Gly Thr
100 105 110

Ala Thr Gly Gly Ala Thr Cys Ala Gly Thr Thr Thr Gly Cys Thr Gly
115 120 125

Thr Thr Thr Gly Cys Thr Thr Thr Ala Gly Cys Gly Thr Thr Ala Ala
130 135 140

Thr Cys Thr Thr Thr Ala Cys Gly Ala Thr Gly Gly Cys Gly Thr Thr
145 150 155 160

Cys Gly Gly Cys Ala Gly Cys Ala Cys Ala Thr Cys Cys Thr Cys Thr
165 170 175

Gly Cys Cys Cys Ala Gly Gly Cys Gly Gly Cys Ala Gly Gly Gly Ala
180 185 190

Ala Ala Thr Cys Ala Ala Ala Cys Gly Gly Gly Gly Ala Ala Ala Ala
195 200 205

Gly Ala Ala Ala Thr Ala Thr Ala Thr Thr Gly Thr Cys Gly Gly Gly
210 215 220

Thr Thr Thr Ala Ala Ala Cys Ala Gly Ala Cys Ala Ala Thr Gly Ala
225 230 235 240

Gly Cys Ala Cys Gly Ala Thr Gly Ala Gly Cys Gly Cys Cys Gly Cys
245 250 255

Thr Ala Ala Gly Ala Ala Gly Ala Ala Ala Gly Ala Thr Gly Thr Cys
260 265 270

Ala Thr Thr Thr Cys Thr Gly Ala Ala Ala Ala Ala Gly Gly Cys Gly
275 280 285

Gly Gly Ala Ala Ala Gly Thr Gly Cys Ala Ala Ala Ala Gly Cys Ala
290 295 300

Ala Thr Thr Cys Ala Ala Ala Thr Ala Thr Gly Thr Ala Gly Ala Cys

305 310 315 320

Gly Cys Ala Gly Cys Ala Thr Cys Ala Gly Thr Cys Ala Cys Ala Thr
325 330 335

Thr Ala Ala Ala Cys Gly Ala Ala Ala Ala Ala Gly Cys Thr Gly Thr
340 345 350

Ala Ala Ala Ala Gly Ala Ala Thr Thr Gly Ala Ala Ala Ala Ala Ala
355 360 365

Gly Ala Cys Cys Cys Gly Ala Gly Cys Gly Thr Cys Gly Cys Thr Thr
370 375 380

Ala Cys Gly Thr Thr Gly Ala Ala Gly Ala Ala Gly Ala Thr Cys Ala
385 390 395 400

Cys Gly Thr Ala Gly Cys Ala Cys Ala Thr Gly Cys Gly Thr Ala Cys
405 410 415

Gly Cys Gly Cys Ala Gly Thr Cys Cys Gly Thr Gly Cys Cys Thr Thr
420 425 430

Ala Cys Gly Gly Cys Gly Thr Ala Thr Cys Ala Cys Ala Ala Ala Thr
435 440 445

Thr Ala Ala Ala Gly Cys Cys Cys Cys Thr Gly Cys Thr Cys Thr Gly
450 455 460

Cys Ala Cys Thr Cys Thr Cys Ala Ala Gly Gly Cys Thr Ala Cys Ala
465 470 475 480

Cys Thr Gly Gly Ala Thr Cys Ala Ala Ala Thr Gly Thr Thr Ala Ala
485 490 495

Ala Gly Thr Ala Gly Cys Gly Gly Thr Thr Ala Thr Cys Gly Ala Cys
500 505 510

Ala Gly Cys Gly Gly Thr Ala Thr Cys Gly Ala Thr Thr Cys Thr Thr
515 520 525

Cys Thr Cys Ala Thr Cys Cys Thr Gly Ala Thr Thr Thr Ala Ala Ala
530 535 540

Gly Gly Thr Ala Gly Cys Ala Ala Gly Cys Gly Gly Ala Gly Cys Cys
545 550 555 560

Ala Gly Cys Ala Thr Gly Gly Thr Thr Cys Cys Thr Thr Cys Thr Gly
565 570 575

Ala Ala Ala Cys Ala Ala Thr Cys Cys Thr Thr Thr Cys Cys Ala
580 585 590

Ala Gly Ala Cys Ala Ala Cys Ala Ala Cys Thr Cys Thr Cys Ala Cys
595 600 605

Gly Gly Ala Ala Cys Thr Cys Ala Cys Gly Thr Thr Gly Cys Cys Gly
610 615 620

Gly Cys Ala Cys Ala Gly Thr Thr Gly Cys Gly Gly Cys Thr Cys Thr
625 630 635 640

Thr Ala Ala Thr Ala Ala Cys Thr Cys Ala Ala Thr Cys Gly Gly Thr
645 650 655

Gly Thr Ala Thr Thr Ala Gly Gly Cys Gly Thr Thr Gly Cys Gly Cys
660 665 670

Cys Ala Ala Gly Cys Gly Cys Ala Thr Cys Ala Cys Thr Thr Thr Ala
675 680 685

Cys Gly Cys Thr Gly Thr Ala Ala Ala Ala Gly Thr Thr Cys Thr Cys
690 695 700

Gly Gly Thr Gly Cys Thr Gly Ala Cys Gly Gly Thr Thr Cys Cys Gly
705 710 715 720

Gly Cys Cys Ala Ala Thr Ala Cys Ala Gly Cys Thr Gly Gly Ala Thr
725 730 735

Cys Ala Thr Thr Ala Ala Cys Gly Gly Ala Ala Thr Cys Gly Ala Gly
740 745 750

Thr Gly Gly Gly Cys Gly Ala Thr Cys Gly Cys Ala Ala Ala Cys Ala
755 760 765

Ala Thr Ala Thr Gly Gly Ala Cys Gly Thr Thr Ala Thr Thr Ala Ala
770 775 780

Cys Ala Thr Gly Ala Gly Cys Cys Thr Cys Gly Gly Cys Gly Gly Ala
785 790 795 800

Cys Cys Thr Thr Cys Thr Gly Gly Thr Thr Cys Thr Gly Cys Thr Gly
805 810 815

Cys Thr Thr Thr Ala Ala Ala Ala Gly Cys Gly Gly Cys Ala Gly Thr
820 825 830

Thr Gly Ala Thr Ala Ala Ala Gly Cys Cys Gly Thr Thr Gly Cys Ala
835 840 845

Thr Cys Cys Gly Gly Cys Gly Thr Cys Gly Thr Ala Gly Thr Cys Gly
850 855 860

Thr Thr Gly Cys Gly Gly Cys Ala Gly Cys Cys Gly Gly Thr Ala Ala
865 870 875 880

Cys Gly Ala Ala Gly Gly Cys Ala Cys Thr Thr Cys Cys Gly Gly Cys
885 890 895

Ala Gly Cys Thr Cys Ala Ala Gly Cys Ala Cys Ala Gly Thr Gly Gly
900 905 910

Gly Cys Thr Ala Cys Cys Cys Thr Gly Gly Thr Ala Ala Ala Thr Ala
915 920 925

Cys Cys Cys Thr Thr Cys Thr Gly Thr Cys Ala Thr Thr Gly Cys Ala
930 935 940

Gly Thr Ala Gly Gly Cys Gly Cys Thr Gly Thr Thr Gly Ala Cys Ala
945 950 955 960

Gly Cys Ala Gly Cys Ala Ala Cys Cys Ala Ala Ala Gly Ala Gly Cys
965 970 975

Ala Thr Cys Thr Thr Thr Cys Thr Cys Ala Ala Gly Cys Gly Thr Ala
980 985 990

Gly Gly Ala Cys Cys Thr Gly Ala Gly Cys Thr Thr Gly Ala Thr Gly
995 1000 1005

Thr Cys Ala Thr Gly Gly Cys Ala Cys Cys Thr Gly Gly Cys Gly
1010 1015 1020

Thr Ala Thr Cys Thr Ala Thr Cys Cys Ala Ala Ala Gly Cys Ala
1025 1030 1035

Cys Gly Cys Thr Thr Cys Cys Thr Gly Gly Ala Ala Ala Cys Ala
1040 1045 1050

Ala Ala Thr Ala Cys Gly Gly Gly Gly Cys Gly Thr Ala Cys Ala
1055 1060 1065

Ala Cys Gly Gly Thr Ala Cys Gly Thr Cys Ala Ala Thr Gly Gly
1070 1075 1080

Cys Ala Thr Cys Thr Cys Cys Gly Cys Ala Cys Gly Thr Thr Gly
1085 1090 1095

Cys Cys Gly Gly Ala Gly Cys Gly Gly Cys Thr Gly Cys Thr Thr
1100 1105 1110

Thr Gly Ala Thr Thr Cys Thr Thr Thr Cys Thr Ala Ala Gly Cys
1115 1120 1125

Ala Cys Cys Cys Gly Ala Ala Cys Thr Gly Gly Ala Cys Ala Ala
1130 1135 1140

Ala Cys Ala Cys Thr Cys Ala Ala Gly Thr Cys Cys Gly Cys Ala
1145 1150 1155

Gly Cys Ala Gly Thr Thr Thr Ala Gly Ala Ala Ala Ala Cys Ala
1160 1165 1170

Cys Cys Ala Cys Thr Ala Cys Ala Ala Ala Ala Cys Thr Thr Gly
1175 1180 1185

Gly Thr Gly Ala Thr Thr Cys Thr Thr Thr Gly Thr Ala Cys Thr
1190 1195 1200

Ala Thr Gly Gly Ala Ala Ala Ala Gly Gly Gly Cys Thr Gly Ala
1205 1210 1215

Thr Cys Ala Ala Cys Gly Thr Ala Cys Ala Ala Gly Cys Gly Gly
1220 1225 1230

Cys Ala Gly Cys Thr Cys Ala Gly Thr Ala Ala Ala Ala Cys Ala
1235 1240 1245

Thr Ala Ala Ala Ala Ala Ala Cys Cys Gly Gly Cys Cys Thr Thr
1250 1255 1260

Gly Gly Cys Cys Cys Cys Gly Cys Cys Gly Gly Thr Thr Thr Thr
1265 1270 1275

Thr Thr Ala Thr Thr Ala Thr Thr Thr Thr Thr Cys Thr Thr Cys
1280 1285 1290

Cys Thr Cys Cys Gly Cys Ala Thr Gly Thr Thr Cys Ala Ala Thr
1295 1300 1305

Cys Cys Gly Cys Thr Cys Cys Ala Thr Ala Ala Thr Cys Gly Ala
1310 1315 1320

Cys Gly Gly Ala Thr Gly Gly Cys Thr Cys Cys Cys Thr Cys Thr

1325 1330 1335

Gly Ala Ala Ala Ala Thr Thr Thr Thr Ala Ala Cys Gly Ala Gly
1340 1345 1350

Ala Ala Ala Cys Gly Gly Cys Gly Gly Gly Thr Thr Gly Ala Cys
1355 1360 1365

Cys Cys Gly Gly Cys Thr Cys Ala Gly Thr Cys Cys Cys Gly Thr
1370 1375 1380

Ala Ala Cys Gly Gly Cys Cys Ala Ala Cys Thr Cys Cys Thr Gly
1385 1390 1395

Ala Ala Ala Cys Gly Thr Cys Thr Cys Ala Ala Thr Cys Gly Cys
1400 1405 1410

Cys Gly Cys Thr Thr Cys Cys Cys Gly Gly Thr Thr Thr Cys Cys
1415 1420 1425

Gly Gly Thr Cys Ala Gly Cys Thr Cys Ala Ala Thr Gly Cys Cys
1430 1435 1440

Ala Thr Ala Ala Cys Gly Gly Thr Cys Gly Gly Cys Gly Gly Cys
1445 1450 1455

Gly Thr Thr Thr Thr Cys Cys Thr Gly Ala Thr Ala Cys Cys Gly
1460 1465 1470

Gly Gly Ala Gly Ala Cys Gly Gly Cys Ala Thr Thr Cys Gly Thr
1475 1480 1485

Ala Ala Thr Cys Gly Gly Ala Thr Cys
1490 1495

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<211> 275
<212> PRT
<213> bacillus amyloliquefaciens

<400> 4

Ala Gln Ser Val Pro Tyr Gly Val Ser Gln Ile Lys Ala Pro Ala Leu
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His Ser Gln Gly Tyr Thr Gly Ser Asn Val Lys Val Ala Val Ile Asp
20 25 30

Ser Gly Ile Asp Ser Ser His Pro Asp Leu Lys Val Ala Gly Gly Ala
35 40 45

Ser Met Val Pro Ser Glu Thr Asn Pro Phe Gln Asp Asn As r His
50 60

Gly Thr His Val Ala Gly Thr Val Ala Ala Leu Asn Asn Ser Ile Gly
65 70 75 80

Val Leu Gly Val Ala Pro Ser Ala Ser Leu Tyr Ala Val Lys Val Leu
85 90 95

Gly Ala Asp Gly Ser Gly Gln Tyr Ser Trp Ile Ile Asn Gly Ile Glu
100 105 110

Trp Ala Ile Ala Asn Asn Met Asp Val Ile Asn Met Ser Leu Gly Gly
115 120 125

Pro Ser Gly Ser Ala Ala Leu Lys Ala Ala Val Asp Lys Ala Val Ala
130 135 140

Ser Gly Val Val Val Val Ala Ala Ala Gly Asn Glu Gly Thr Ser Gly
145 150 155 160

Ser Ser Ser Thr Val Gly Tyr Pro Gly Lys Tyr Pro Ser Val Ile Ala
165 170 175

Val Gly Ala Val Asp Ser Ser Asn Gln Arg Ala Ser Phe Ser Ser Val
180 185 190

Gly Pro Glu Leu Asp Val Met Ala Pro Gly Val Ser Ile Gln Ser Thr
195 200 205

Leu Pro Gly Asn Lys Tyr Gly Ala Tyr Asn Gly Thr Ser Met Ala Ser
210 215 220

Pro His Val Ala Gly Ala Ala Ala Leu Ile Leu Ser Lys His Pro Asn
225 230 235 240

Trp Thr Asn Thr Gln Val Arg Ser Ser Leu Glu Asn Thr Thr Thr Lys
245 250 255

Leu Gly Asp Ser Phe Tyr Tyr Gly Lys Gly Leu Ile Asn Val Gln Ala
260 265 270

Ala Ala Gln
275

<210> 5
<211> 275
<212> PRT
<213> bacillus subtilis

<400> 3

Ala Gln Ser Val Pro Tyr Gly Ile Ser Gln Ile Lys Ala Pro Ala Leu
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His Ser Gln Gly Tyr Thr Gly Ser Asn Val Lys Val Ala Val Ile Asp
20 25 30

Ser Gly Ile Asp Ser Ser His Pro Asp Leu Asn Val Arg Gly Gly Ala
35 40 45

Ser Phe Val Pro Ser Glu Thr Asn Pro Tyr Gln Asp Gly Ser Ser His
50 55 60

Gly Thr His Val Ala Gly Thr Ile Ala Ala Leu Asn Asn Ser Ile Gly
65 70 75 80

Val Leu Gly Val Ser Pro Ser Ala Ser Leu Tyr Ala Val Lys Val Leu
85 90 95

Asp Ser Thr Gly Ser Gly Gln Tyr Ser Trp Ile Ile Asn Gly Ile Glu
100 105 110

Trp Ala Ile Ser Asn Asn Met Asp Val Ile Asn Met Ser Leu Gly Gly
115 120 125

Pro Thr Gly Ser Thr Ala Leu Lys Thr Val Val Asp Lys Ala Val Ser
130 135 140

Ser Gly Ile Val Val Ala Ala Ala Ala Gly Asn Glu Gly Ser Ser Gly
145 150 155 160

Ser Thr Ser Thr Val Gly Tyr Pro Ala Lys Tyr Pro Ser Thr Ile Ala
165 170 175

Val Gly Ala Val Asn Ser Ser Asn Gln Arg Ala Ser Phe Ser Ser Ala
180 185 190

Gly Ser Glu Leu Asp Val Met Ala Pro Gly Val Ser Ile Gln Ser Thr
195 200 205

Leu Pro Gly Gly Thr Tyr Gly Ala Tyr Asn Gly Thr Ser Met Ala Thr
210 215 220

Pro His Val Ala Gly Ala Ala Ala Leu Ile Leu Ser Lys His Pro Thr
225 230 235 240

Trp Thr Asn Ala Gln Val Arg Asp Arg Leu Glu Ser Thr Ala Thr Tyr
245 250 255

Leu Gly Asn Ser Phe Tyr Gly Lys Gly Leu Ile Asn V[redacted]n Ala
260 265 270

Ala Ala Gln
275

<210> 6
<211> 274
<212> PRT
<213> bacillus licheniformis

<400> 6

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1 5 10 15

Gln Ala Gln Gly Phe Lys Gly Ala Asn Val Lys Val Ala Val Leu Asp
20 25 30

Thr Gly Ile Gln Ala Ser His Pro Asp Leu Asn Val Val Gly Gly Ala
35 40 45

Ser Phe Val Ala Gly Glu Ala Tyr Asn Thr Asp Gly Asn Gly His Gly
50 55 60

Thr His Val Ala Gly Thr Val Ala Ala Leu Asp Asn Thr Thr Gly Val
65 70 75 80

Leu Gly Val Ala Pro Ser Val Ser Leu Tyr Ala Val Lys Val Leu Asn
85 90 95

Ser Ser Gly Ser Gly Ser Tyr Ser Gly Ile Val Ser Gly Ile Glu Trp
100 105 110

Ala Thr Thr Asn Gly Met Asp Val Ile Asn Met Ser Leu Gly Gly Ala
115 120 125

Ser Gly Ser Thr Ala Met Lys Gln Ala Val Asp Asn Ala Tyr Ala Arg
130 135 140

Gly Val Val Val Val Ala Ala Ala Gly Asn Ser Gly Asn Ser Gly Ser
145 150 155 160

Thr Asn Thr Ile Gly Tyr Pro Ala Lys Tyr Asp Ser Val Ile Ala Val
165 170 175

Gly Ala Val Asp Ser Asn Ser Asn Arg Ala Ser Phe Ser Ser Val Gly
180 185 190

Ala Glu Leu Glu Val Met Ala Pro Gly Ala Gly Val Tyr Ser Thr Tyr
195 200 205

Pro Thr Asn Thr Tyr Ala Thr Leu Asn Gly Thr Ser Met Ala Ser Pro
210 215 220

His Val Ala Gly Ala Ala Ala Leu Ile Leu Ser Lys His Pro Asn Leu
225 230 235 240

Ser Ala Ser Gln Val Arg Asn Arg Leu Ser Ser Thr Ala Thr Tyr Leu
245 250 255

Gly Ser Ser Phe Tyr Tyr Gly Lys Gly Leu Ile Asn Val Glu Ala Ala
260 265 270

Ala Gln

<210> 7
<211> 269
<212> PRT
<213> bacillus lentus

<400> 7

Ala Gln Ser Val Pro Trp Gly Ile Ser Arg Val Gln Ala Pro Ala Ala
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His Asn Arg Gly Leu Thr Gly Ser Gly Val Lys Val Ala Val Leu Asp
20 25 30

Thr Gly Ile Ser Thr His Pro Asp Leu Asn Ile Arg Gly Gly Ala Ser
35 40 45

Phe Val Pro Gly Glu Pro Ser Thr Gln Asp Gly Asn Gly His Gly Thr
50 55 60

His Val Ala Gly Thr Ile Ala Ala Leu Asn Asn Ser Ile Gly Val Leu
65 70 75 80

Gly Val Ala Pro Ser Ala Glu Leu Tyr Ala Val Lys Val Leu Gly Ala
85 90 95

Ser Gly Ser Gly Ser Val Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala
100 105 110

Gly Asn Asn Gly Met His Val Ala Asn Leu Ser Leu Gly Ser Pro Ser
115 120 125

Pro Ser Ala Thr Leu Glu Gln Ala Val Asn Ser Ala Thr Ser Arg Gly
130 135 140

Val Leu Val Val Ala [illegible] Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser
145 150 155 160

Tyr Pro Ala Arg Tyr Ala Asn Ala Met Ala Val Gly Ala Thr Asp Gln
165 170 175

Asn Asn Asn Arg Ala Ser Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile
180 185 190

Val Ala Pro Gly Val Asn Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr
195 200 205

Ala Ser Leu Asn Gly Thr Ser Met Ala Thr Pro His Val Ala Gly Ala
210 215 220

Ala Ala Leu Val Lys Gln Lys Asn Pro Ser Trp Ser Asn Val Gln Ile
225 230 235 240

Arg Asn His Leu Lys Asn Thr Ala Thr Ser Leu Gly Ser Thr Asn Leu
245 250 255

Tyr Gly Ser Gly Leu Val Asn Ala Glu Ala Ala Thr Arg
260 265